

In the claims:

Claims 1-36 cancelled.

37. (New) A pipe, comprising a spiral for checking and/or repair of a wall, said spiral having a helical lead with a pitch which does not exceed a critical length of a crack in the pipe.

38. (New) A pipe as defined in claim 37, wherein said spiral is arranged on an outer surface of the pipe.

39. (New) A pipe as defined in claim 37, wherein said spiral is configured as a groove which is filled with a material.

40. (New) A pipe as defined in claim 37, wherein said spiral is formed by a crack in the wall of the pipe.

41. (New) A pipe as defined in claim 40, wherein borders of said crack are fixed by a filler.

42. (New) A pipe as defined in claim 41, wherein the filler contains a vitreous mass.

43. (New) A pipe as defined in claim 41, wherein said filler has a convexity.

44. (New) A method of pipeline checking, comprising the steps of checking a conductive spiral as defined in claim 37 of a pipeline under pressure, formed as a double layer; registering characteristics of investigations; determining defects of the pipeline based on the registered characteristics; passing through one of layers optical vibrations; determining a crack of a wall of the pipeline by registering by means of a second layer of an electromagnetic wave which is reflected by borders of a crack

45. (New) A method of repairing a pipeline, comprising the steps of reducing a pressure in a cavity of a pipeline; eliminating a defect of a wall of the pipeline; forming in the pipeline a conductive spiral as defined in claim 37 in form of a double layer; passing through one of the layers optical vibrations; determining a crack in a wall of the pipeline by registering by means of a second layer of electromagnetic wave reflected by borders of the crack; at the registration of the reflected electromagnetic wave reducing pressure in a cavity of the pipeline; and restoring its wall by a heat of vibrations passing by one layer or both layers into an opening of the crack.

46. (New) A method as defined in claim 45; and further comprising using a heat of vibrations of a laser radiation.

47. (New) A device for performing the method of claim 44, comprising a pipeline under pressure; a sensor formed as an optically conducting spiral in accordance with claim 37 of a pipeline, formed as a double layer; a monitor with a computer connected through the center through fiber-optic lines through one or two lasers and an opto-electronic pair, wherein together with a valve of pressure reduction a system of automatic control and/or repair of cracks of a pipeline wall is formed.

48. (New) A device as defined in claim 47, wherein the sensor is located on an outer surface of the pipeline formed as an oil pipeline.

49. (New) A device for performing the method of claim 43, comprising a pipeline under pressure; a sensor formed as an optically conducting spiral in accordance with claim 37 of a pipeline, formed as a double layer; a monitor with a computer connected through the center through fiber-optic lines through one or two lasers and an opto-electronic pair, wherein together with a valve of pressure reduction a system of automatic control and/or repair of cracks of a pipeline wall is formed.

50. (New) A device as defined in claim 49, wherein the sensor is located on an outer surface of the pipeline formed as an oil pipeline.

51. (New) A device for performing the method of claim 43, comprising a pipeline; a sensor formed as optically conducting spiral of a pipeline, wherein the device is composed of pipes with a conductive helical layer.

52. (New) A device as defined in claim 51, wherein the sensor is located on an outer surface of a pipeline which is formed as an oil pipeline.